

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of

Rappaport et al.

Serial No.: Not Assigned

Group Art Unit: Not Assigned

(Divisional of 10/606,115 filed 06/26/03, which is a  
Continuation of 09/633,121 filed 08/04/00 , now  
U.S. Patent 6,625,454)

Filed: Concurrently

Examiner: Not Assigned

For: METHOD AND SYSTEM, WITH COMPONENT KITS, FOR DESIGNING OR  
DEPLOYING A COMMUNICATIONS NETWORK WHICH CONSIDERS  
FREQUENCY DEPENDENT EFFECTS

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Under the provisions of 37 C.F.R. 1.97 through 1.99 and pursuant to applicant's duty of disclosure under 37 C.F.R. 1.56, applicant respectfully brings the following documents, listed on the attached form PTO-1449, to the attention of the Examiner in charge of the above-identified application. Under the provisions of 37 C.F.R. 1.98(d) copies of the references are not required. Copies of the references can be found in the parent case (U.S. Patent Application Serial Number 09/469,102 filed 12/21/99).

This citation does not constitute an admission that the references are relevant or material to the claims. They are only cited as constituting related art of which the applicant is aware.

This statement shall not be construed as a representation that a search has been made or that no other art than that identified exists.

It is respectfully requested that the listed references be considered by the Examiner and formally made of record in this application.

Respectfully submitted,



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**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

Docket Number (Optional)

02560032CA

Application Number

not assigned

Applicant(s)

Rappaport et al.

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Group Art Unit

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**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
AS	A	US-6317599	11-2001	Rappaport et al.	455/446
AS	B	US-6493679	12-2002	Rappaport et al.	705/29
AS	C	US-6496290	12-2002	Lee	359/136
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	/Akash Saxena/ (01/31/2007)

A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a)(1))

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. /Akash Saxena/ (01/31/2007)

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**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AS	1	4,675,147	6-23-87	Schaefer et al.			4-6-83
	2	4,736,453	4-5-88	Schloemer			12-10-85
	3	4,885,694	12-5-89	Pray et al.			4-29-87
	4	5,111,392	5-5-92	Malin			6-9-89
	5	5,119,307	6-2-92	Blaha et al.			12-22-89
	6	5,239,487	8-24-93	Horejsi et al.			10-24-90
	7	5,293,640	3-8-94	Gunnar et al.			
	8	5,307,261	4-26-94	Maki et al.			6-28-91
	9	5,337,149	8-9-94	Kozah et al.			11-12-92
↓	10	5,339,184	8-16-94	Tang			6-15-92
AS	11	5,375,123	12-20-94	Andersson et al.			2-5-93

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*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AS	12	5,394,522	2-28-95	Sanchez-Frank et al.			9-13-93
	13	5,450,615	9-12-95	Fortune et al.			12-22-93
	14	5,458,123	10-17-95	Unger			4-29-94
	15	5,465,390	11-7-95	Cohen			2-12-93
	16	5,482,050	1-9-96	Smokoff et al.			2-17-94
	17	5,485,568	1-16-96	Venable et al.			10-8-93
	18	5,491,644	2-13-96	Pickering et al.			9-7-93
	19	5,491,837	2-13-96	Haartsen			3-7-94
	20	5,493,679	2-20-96	Virgil et al.			10-29-93
↓	21	5,515,269	5-7-96	Willis et al.			11-8-93
AS	22	5,528,518	6-18-96	Bradshaw et al.			10-25-94

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AS	23	5,539,665	7-23-96	Lamming et al.			7-25-94
	24	5,553,312	9-3-96	Gatley et al.			6-20-94
	25	5,553,620	9-10-96	Snider et al.			5-2-95
	26	5,555,354	9-10-96	Strasnick et al.			3-23-93
	27	5,561,841	10-1-96	Markus			
	28	5,564,070	10-8-96	Want et al.			7-30-93
	29	5,594,946	1-14-97	Menich et al.			2-28-95
	30	5,598,532	1-28-97	Liron			10-21-93
	31	5,625,827	4-29-97	Krause et al.			12-23-94
	32	5,636,344	6-3-97	Lewis			8-22-91
AS	33	5,689,355	11-18-97	Okubo et al.			7-1-96

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AS	34	5,761,093	6-2-98	Urbish et al.			5-8-97
	35	5,794,128	8-11-98	Brockel et al.			9-20-95
	36	5,799,154	8-25-98	Kuriyan			6-27-96
	37	5,809,282	8-15-98	Cooper et al			6-7-95
	38	5,815,395	9-29-98	Hart et al.			6-29-95
	39	5,828,960	10-27-98	Tang et al.			3-31-95
	40	5,831,610	11-3-98	Tonelli et al.			2-23-96
	41	5,832,389	11-3-98	Dent			4-3-96
	42	5,861,887	1-19-99	Butler et al.			12-5-95
✓	43	5,867,112	2-2-99	Kost			5-14-91
AS	44	5,877,777	3-2-99	Colwell			4-7-97

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AS	45	5,878,328	3-2-99	Chawla et al.			12-21-95
	46	5,907,850	5-25-99	Krause et al.			1-21-97
	47	5,917,808	6-29-99	Kosbab			1-17-97
	48	5,923,850	7-13-99	Barroux			6-28-96
	49	5,926,762	7-20-99	Arpec et al.			5-17-96
	50	5,940,196	8-17-99	Piehler et al.			5-16-97
	51	5,945,976	8-31-99	Iwamura et al.			12-10-96
	52	5,948,055	9-7-99	Pulsipher et al.			8-29-96
	53	5,949,335	9-7-99	Maynard			4-14-98
↓	54	5,949,988	9-7-99	Feisullin et al.			4-3-97
AS	55	5,953,669	9-14-99	Stratis et al.			12-11-97

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EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AS	56	5,963,867	10-5-99	Reynolds et al.			8-16-95
	57	5,970,406	10-19-99	Komara			12-31-96
	58	5,987,328	11-16-99	Ephremides et al.			4-24-97
	59	6,006,021	12-21-99	Tognazzini			7-1-96
	60	6,018,625	1-25-00	Hayball et al.			8-27-97
	61	6,021,316	2-1-00	Heiska et al.			
	62	6,032,105	2-29-00	Lee et al.			7-31-97
	63	6,038,547	3-14-00	Casto			1-7-98
	64	6,044,273	3-28-00	Tekinay			12-10-96
↓	65	6,058,102	5-2-00	Drysdale et al.			11-6-98
AS	66	6,058,262	5-2-00	Kawas et al.			4-18-97

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AS	67	6,059,842	5-9-00	Dumarot et al.			4-14-98
	68	6,061,722	5-9-00	Lipa et al.			12-23-96
	69	6,075,541	6-13-00	Maclinovsky			11-7-97
	70	6,088,522	7-11-00	Lee et al.			7-31-97
	71	6,104,699	8-15-00	Holender et al.			
	72	6,108,309	8-22-00	Cohoe et al.			12-8-97
	73	6,111,857	8-29-00	Soliman et al.			9-11-97
	74	6,122,083	9-19-00	Ohta et al.			10-3-94
	75	6,148,010	11-14-00	Sutton et al.			6-24-98
↓	76	6,199,032	3-6-01	Anderson			7-22-98
AS	77	6,204,813	3-20-01	Wadell et al.			2-20-98

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AS	78	6,208,833	3-27-01	Preschutti et al.			6-24-97
	79	6,229,540	5-8-01	Tonelli et al.			10-13-98
	80	6,253,086	6-26-01	Parantainen et al.			3-25-99
	81	6,285,377	9-4-01	Greenbaum et al.			6-26-97
	82	6,289,203	9-11-01	Smith et al.			2-25-98
	83	6,317,599	11-13-01	Rappaport et al.			5-26-99
	84	6,326,987	12-4-01	Alexander			12-19-00
	85	6,330,005	12-11-01	Tonelli et al.			10-6-99
	86	6,311,144	10-30-01	Abu El Ata			7-31-98
↓	87	6,337,688	1-8-02	Berstis			1-29-99
AS	88	6,338,031	1-8-02	Lee et al.			9-23-99

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							YES	NO

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## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AS	89	6,356,758	3-12-02	Almeida et al.			12-31-97
	90	6,393,432	5-21-02	Flansburg et al.			6-2-99
	91	6,408,312	6-18-02	Forthman et al.			8-30-99
	92	6,442,507	8-27-02	Skidmore et al.			12-29-98
	93	6,470,195	10-22-02	Meyer			10-31-00
	94	6,487,417	11-26-02	Rossoni et al.			11-24-99
	95	6,493,679	12-10-02	Rappaport et al.			5-26-99
	96	6,496,290	12-17-02	Lee			12-17-98
	97	6,499,006	12-24-02	Rappaport et al.			7-14-99
↓	98	6,505,045	1-7-03	Hills et al.			4-10-00
AS	99	5,586,254	12-17-96	Kondo			

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*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AS	100	6,085,335	7-4-00	Djoko et al.			12-31-97
	101	5,710,758	1-20-98	Soliman et al.			9-29-95
	102	5,821,937	10-13-98	Tonelli et al.			8-12-96
	103	5,774,669	6-30-98	George et al.			7-28-95
	104	5,802,146	9-1-98	Dulman			11-22-95
	105	5,825,759	10-20-98	Liu			7-24-95
	106	5,845,124	12-1-98	Berman			5-1-96
	109	6,199,032	3-6-01	Anderson			7-22-98
	110	5,467,441	11-14-95	Stone et al.			10-6-94
	111	6,243,772	6-5-01	Ghori et al.			1-31-97
AS	112	5,994,984	11-30-99	Stancil et al.			5-29-98

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AS	113	5,977,851	11-2-99	Stancil et al.			11-13-97
AS	114	5,755,072	5-26-98	Lingafelter			5-13-98

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		From Bird's Eye Real-time Mapping Software dated 6-30-02 NOT COONSIDERED - NOT PRESENT IN FILE WRAPPER
		IEEE Transactions on Antennas and propagation, Vol. 46, No. 8, August 1998. "Effect of Terrain on Path Loss in Urban Enviroments for Wireless Applications" Leonard Piazzi and Henry L. Bertoni NOT COONSIDERED - NOT PRESENT IN FILE WRAPPER

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*EXAMINER INITIAL	OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>		
1	P. Bahl, V. Padmanabhan, and A. Balachandran, "A Software System for Locating Mobile Users: Design, Evaluation, and Lessons," Microsoft Technical Report, April 2000 NOT COONSIDERED - NOT PRESENT IN FILE WRAPPER		
2	G. Durkin, T.S. Rappaport, H. Xu, Measurements and Models for Radio Path Loss and Penetration Loss in and Around Homes and Trees at 5.85 GHz," IEEE Transactions on Communications, vol. 46, no. 11, November 1998.		
3	C.M. Peter Ho et al., "Antenna Effects on Indoor Obstructed Wireless Channels and a Deterministic Image-Based Wide-Band Propagation Model for In-Building Personal Communications Systems," International Journal of Wireless Information Networks, Vol. 1, No. 1, 1994.		
4	S. Kim et al., "Radio Propagation Measurements and Predictions Using Three-dimensional Ray Tracing in Urban Environments at 908 MHz and 1.9 GHz," IEEE Transactions on Vehicular Technology, vol. 48, no. 3, May 1999		
5	T.S. Rappaport et al., "Use of Topographic Maps with Building Information to Determine Antenna Placements and GPS Satellite Coverage for Radio Detection and Tracking in Urban Environments," MPRG Technical Report MPRG-TR-95-14, Virginia Tech, September 1995		
6	R.K. Morrow, Jr. and T.S. Rappaport, "Getting In," Wireless Review Magazine, March 2000.		
7	Wireless Valley Communications, Inc., "SitePlanner 3.16 for Windows 95/98/NT User's Manual," Software User's Manual, pp.5-148 to 5-156, 1999.		
8	M. Panjwani et al., "Interactive Computation of Coverage Regions for Wireless Communication in Multifloored Indoor Environments," IEEE Journal on Selected Areas in Communications, Vol. 14, No. 3, April 1996.		
9	L. Piazzzi and H.L. Bertoni, "Achievable Accuracy of Site-Specific Path-Loss Predictions in Residential Environments" IEEE Transactions on Vehicular Technology, vol. 48, no. 3, May 1999.		
10	T.S. Rappaport et al., "Wireless Communications: Past Events and a Future Perspective", IEEE Communications Magazine, May 2002.		
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